



No. 15,443/20.

APPLICATION DATED

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<i>Applicant (Actual Inventor)</i> ... ..	WILLIAM JOHN JAMES.
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<i>Complete Specification</i> ... ..	Lodged 4th March, 1921.
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**Class 80.3.**

*Drawing attached.*

COMPLETE SPECIFICATION.

**"Improvements relating to wood-planing tools."**

I, WILLIAM JOHN JAMES, of Fewster Road, Hampton, in the State of Victoria, Commonwealth of Australia, Carpenter, hereby declare this invention and the manner in which it is to be performed to be fully described and ascertained in and by the following statement:—

The present invention appertains to carpenter's cutting and surface-smoothing tools or planes which at present consist of a bit-iron having an inclined set in a flat-soled stock the iron being secured against the slanting surfaces known as the bed by a wedge which latter is introduced between the iron and a shoulder or abutment ahead of said bed.

The object of the present invention is to eliminate the necessity for the wedge with the result that the abutment required for the support of the wedge is no longer required which further reduces the costs of manufacture and furthermore the stock when made of wood can be manufactured from a wider range of timber than heretofore because the use of the wedge tends to burst the stock and consequently only selected timber possessing a high degree of strength could be employed.

Briefly stated the objects above mentioned are attained by providing a slotted plate over the recess in the bed of the plane to receive

and retain a nut on a screw provided on the cutting iron and which is tightened up to fix said iron in position. When a backing iron is used the screw is fixed thereto and its shank passes through the usual longitudinal slot in the cutter iron.

A practical form of the invention is depicted in the accompanying drawings whereof

Fig. 1 is a longitudinal section through a 10 plane with a wooden stock and

Fig. 2 a plan of same without the cutter iron.

As illustrated the recess 1 in the bed 2 is partially covered by means of an iron plate 3 formed with a longitudinal stepped slot 4 and let into the upper portion of the bed with its outer surface flush with the bottom portion of the bed.

The cutter iron 5 is formed with a longitudinal slot 6 to receive the shank 7 of a screw screwed through the backing iron 8 and said shank is provided with a nut 9 having one or more straight edges to prevent the screw turning. The cutter iron with its attached backing iron is placed in the usual through slot 10 of the stock with the nut 9 in the recess 1 and at the back of the plate 3 with the shank 7 of the screw engaging

the slot 4 of said plate. The screw is then partially tightened up with the cutter iron in approximately correct position, and when said cutter iron is finally adjusted according 5 to the requirement of the plane, the screw is firmly screwed down.

In order to facilitate the final adjustment of the cutter iron it is provided with a nut 11 in threaded engagement with which is a 10 screw 12 formed by a circumferential groove with a reduced neck 13 which is adapted to be seated in a slot 14 formed in a bent lug 15 screwed to the bottom of the recess 1 at its upper end.

15 The shoulders at both sides of the neck prevent progressive movement of the adjusting screw 12 the rotation of which moves the nut and consequently the cutter iron in longitudinal direction thus determining the extent 20 to which the edge of the cutter iron will project below the sole of the plane.

The nut 11 may be provided by forming a screw threaded hole in a lug bent from a plate 16 secured by the screw 17 that is 25 usually employed to relatively adjust the cutter iron and backing iron.

It is to be clearly understood that the backing iron is not essential and may be dispensed with in which case the adjusting nut 30 11 if used is fixed directly to the cutter iron by a screw or one or more rivets.

Having now fully described and ascertained my said invention and the manner

in which it is to be performed, I declare that what I claim is:—

1. In wood stock planes, a metal plate with a longitudinal slot fixed flush with the bed and partially covering the longitudinal 5 recess therein and a screw on the cutter iron the shank of which enters said slot and is provided with a nut in engagement with the back of said plate.

2. In wood stock planes, a metal plate 10 with a longitudinal slot fixed flush with the bed and partially covering the longitudinal recess therein and a screw on the backing iron the shank of which passes through the longitudinal slot in the cutter iron and 15 enters the slot in plate and is provided with a nut in engagement with the back of said plate.

3. In wood stock planes, a metal plate with a longitudinal slot partially covering 20 the longitudinal recess in the bed, a screw on the cutter or the backing iron the shank of which enters said slot and is provided with a nut on its inner end in combination with a nut on the cutter or the backing iron en- 25 gaged by a screw engaging a slotted lug on the stock of the plane to prevent progression of said screw.

Dated this 4th day of March, 1921.

EDWD. WATERS & SONS, 30  
Patent Attorneys for  
WILLIAM JOHN JAMES.

Witness—Arthur Jaques.

